

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD**

**RECREATION LAND GRADING AND SHAPING, (AC.)**

**CODE 566**

**DEFINITION**

Reshaping the surface of the land to support recreation land use.

**PURPOSE**

This practice may be applied as part of a resource management system to support one or more of the following purposes:

- Establish or improve effective use of the land area for recreation.
- Minimize on-site and off-site damage to resources from recreation land use.

**CONDITIONS WHERE PRACTICE APPLIES**

On land areas where surface irregularities, slopes, obstructions, or surface drainage interfere with planned recreational use, or where such use requires designed land surfaces.

**CRITERIA**

**General Criteria Applicable to All Purposes**

All planned work shall comply with federal, state, local and tribal laws and regulations.

The grading or shaping shall be conducive to the overall recreation area and aesthetically blend with the general landscape and surroundings.

The grading or shaping shall be configured to minimize adverse on-site and off-site impacts such as accelerated erosion, riparian zone degradation, stream channel and streambank damage, hydrology modification, other water resource damage, aesthetics or unacceptable damage to wildlife habitat, fragmentation, or restrict wildlife movement.

**Grading and Shaping.** If only shaping is required, the cuts and fills may be estimated by observation or by a minimum amount of surveying. If grading to uniform surfaces is required, the design shall be based on a complete topographic or grid survey. Grading and shaping for specific uses, such as athletic fields shall be according to the requirements of the intended use.

Cuts and fills shall be balanced to the greatest extent possible.

Soil compaction and displacement shall be kept to a minimum.

**Surface drainage.** Plans shall include measures for removing or otherwise providing for control of excess surface water.

**Erosion control.** Plans shall include provisions for control of erosion. Disturbed areas shall be established to vegetation as soon as practicable after construction. If soil or climatic conditions precludes the use of vegetation, and protection is needed, non-vegetative means, such as mulches or gravel, may be used. Seedbed preparation, seeding, fertilizing, and mulching shall be according to the appropriate conservation practice standard in the local Field Office Technical Guide. Use vegetation adapted to the site that will accomplish the desired purpose. Preference shall be given to native plant species. If native plant materials are not adaptable or proven effective for the planned use, then non-native species may be used.

**CONSIDERATIONS**

Consider adjoining land uses and the proximity to residences, utilities, cultural resource areas, threatened and endangered species of plants and animals, wetlands or other

environmentally sensitive areas, and areas of special scenic value.

Consider the effects of increased recreation and activities on the quality of both surface and ground water quality.

Consider maintaining or improving habitat for fish and wildlife where applicable.

Consider saving and maintaining trees and other vegetation that have scenic value, provide shade, provide den sites and food for wildlife, or add visual quality to the area.

Where feasible and appropriate, soil material suited for plant growth should be salvaged, stockpiled and protected for use as final cover material.

#### **PLANS AND SPECIFICATIONS**

Plans and specifications for recreation land grading and shaping shall be in keeping with this standard and shall describe the

requirements for applying the practice to achieve its intended purpose. Plans and specifications shall include construction plans, drawings, job sheets or other similar documents. These documents shall specify the requirements for installing the practice, including the kind, amount and quality of materials to be used.

#### **OPERATION AND MAINTENANCE**

An Operation and Maintenance (O&M) plan shall be prepared for and reviewed with the landowner or operator. The plan shall specify that the treated areas and associated practices are inspected annually and after significant storm events to identify repair and maintenance needs.

**CONSTRUCTION SPECIFICATION**  
**NATURAL RESOURCES CONSERVATION SERVICE**  
**RECREATION LAND GRADING AND SHAPING**

**1. Scope**

This item shall consist of the grading and shaping of land to establish or improve use of the land for recreation or to provide for proper installation of planned recreation facilities. Construction operations shall be done in such a manner that erosion, air, water, and noise pollution will be minimized and held within legal limits as established by state regulations.

**2. Erosion and sediment control**

Practices for erosion and sediment control shall be installed prior to land disturbance activities as appropriate and shall be installed according to the plans and specifications. The sequence of construction shall be established to minimize the time that disturbed areas remain unvegetated and susceptible to erosion. Temporary vegetation or mulching shall be applied to disturbed areas that are to be exposed and unfinished for extended periods of time.

**3. Clearing and grubbing**

Except for trees marked for preservation, the designated areas shall be cleared and grubbed of all trees, stumps, large roots, debris, and other objectionable material. All residue from the operation shall be disposed of by burning, burying at approved locations or otherwise removed from the site. All burning shall conform to Alabama laws and regulations. Rubber, plastics, and other non-woody materials shall not be burned.

**4. Earthwork**

The areas to be smoothed or graded shall be finished to the lines, grades, and sections as specified in the plans. All fill areas shall be provided with an allowance for settlement of approximately 10 percent unless otherwise specified.

Materials placed in fill sections shall be free of objectionable material. The placing and spreading of the fill material will be started at the lowest point in the fill and the fill brought up in horizontal layers, not to exceed 9 in. loose thickness. Each layer shall be compacted to the specified density or by routing of construction equipment in the specified manner or by other acceptable means.

Where finished grades are required, grading operations will be controlled from marked reference stakes.

**5. Drainage**

All drainage excavations shall be made to the lines and grade shown in the plan or as staked in the field. All finished sections shall be smooth and of good appearance.

Drainage structures shall be installed in accordance with the construction specification for the applicable practice.

**6. Vegetation**

Vegetation treatment shall be established as specified or as shown on the plans.